3Z7–830
Rev A

E-Z REFERENCE

Supplement to instruction manual 307–830

⚠ WARNING

INSTRUCTIONS

INJECTION HAZARD
This form is only a quick reference to the features and frequently ordered parts of this sprayer. To reduce the risk of serious injury, including fluid injection, while operating or repairing this sprayer, follow the warnings and instructions in manual 307–830.

EM590™ Airless Paint Sprayer

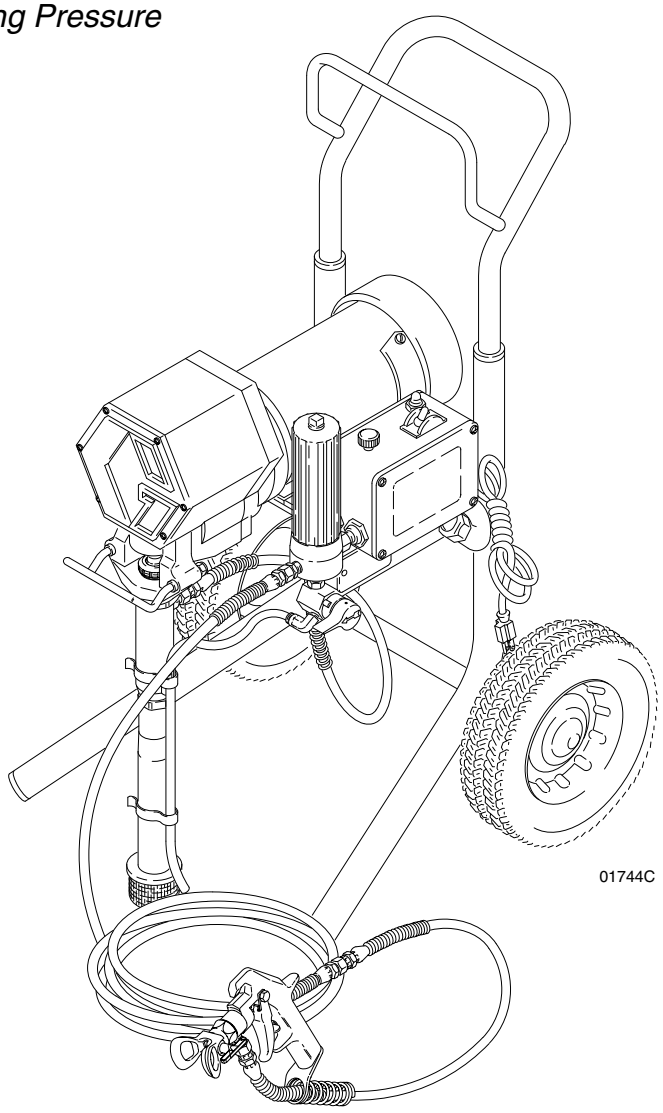
2750 psi (190 bar, 19 MPa) Maximum Working Pressure

Model 220–856, Series D

Basic sprayer on Upright cart without hose or gun

Model 231–590, Series A

Same as 220–856 and includes 50 ft (15.1 m) hose, 3 ft (0.9 m) whip hose and spray gun with RAC® IV DripLess™ Tip Guard and 517 size SwitchTip™



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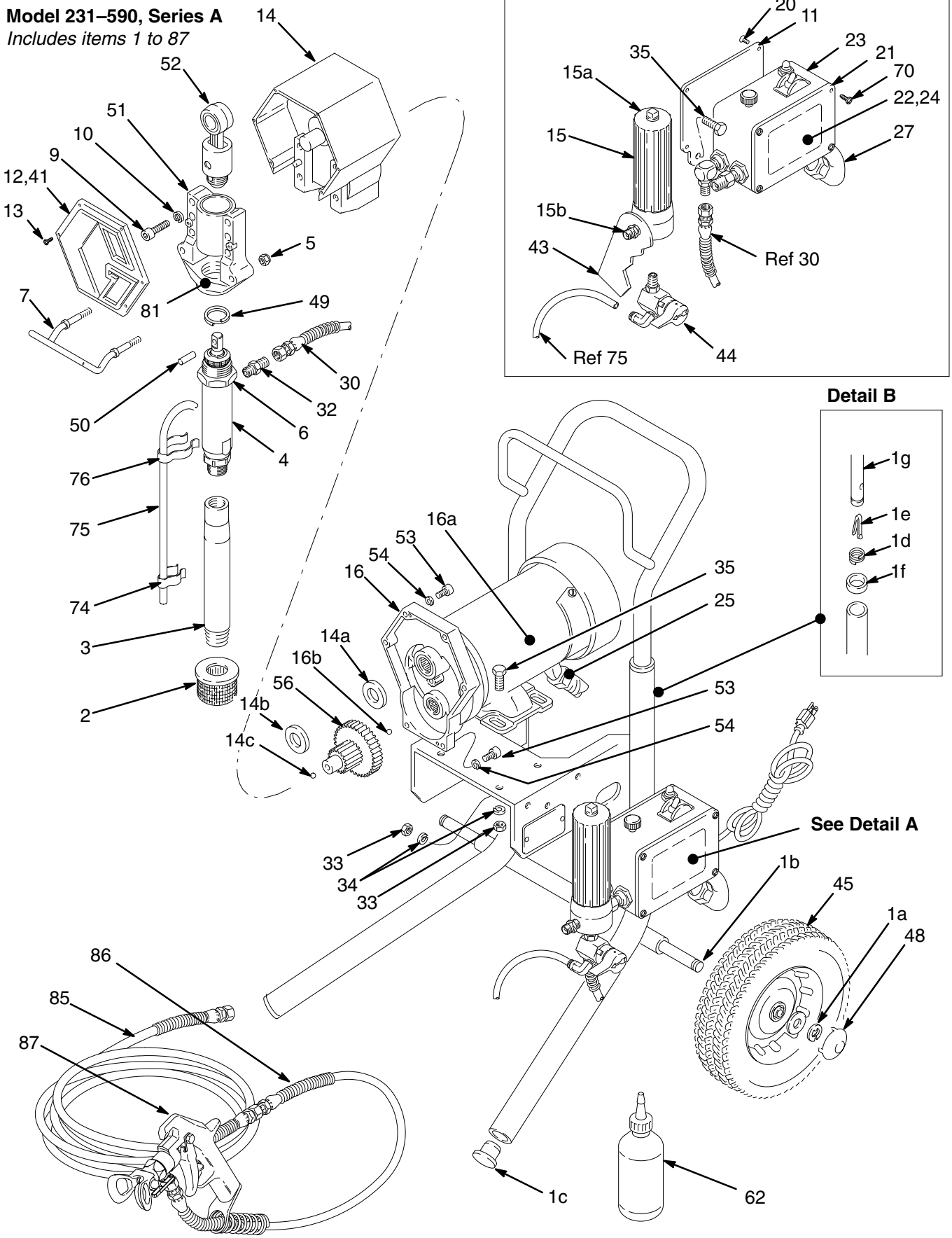
Parts – Upright Sprayer

Model 220–856, Series D
Includes items 1 to 81

Model 231–590, Series A
Includes items 1 to 87



Parts – Upright Sprayer

Model 220–856, Series D
Includes items 1 to 81

Model 231–590, Series A
Includes items 1 to 87

Ref No.	Part No.	Description	Qty
1	220–365	CART ASSEMBLY	
		Includes items 1a – 1g	1
1a	101–242	.RETAINING RING	2
1b	176–884	.WASHER, plain, 5/8”	2
1c	107–310	.PLUG, plastic	2
1d	102–070	.SPRING	2
1e	111–590	.SNAP BUTTON	2
1f	179–781	.SLEEVE	2
1g	220–347	.CART HANDLE	1
2	181–072	KIT, strainer	1
3	180–573	INTAKE TUBE	1
4	**222–580**	**DISPLACEMENT PUMP**	
		See manual 307–806 for parts	**1**
5	112–746	RETAINER NUT	2
6	178–941	NUT, hex	1
7	189–918	PAIL HANGER	1
9	107–210	CAPSCREW, sch, 1/4–20 x 1”	4
10	106–115	LOCKWASHER, spring, 3/8”	4
11	183–536	MOUNTING BRACKET	1
12	183–333	DRIVE HOUSING COVER	1
13	107–156	SCREW, ovh, 8–32 x 3/8”	6
14	**220–859**	**DRIVE HOUSING**	
		Includes items 14a–14d	**1**
14a	178–967	.WASHER, silver–colored	1
14b	107–089	.WASHER, bronze–colored	1
14c	100–069	.BALL, 1/4” sst	1
14d	110–293	.GREASE	1
15	**214–570**	**FLUID FILTER**	
		Includes items 15a and 15b	
		See manual 307–273 for parts	**1**
15a	100–040	.PLUG	1
15b	162–453	.NIPPLE, 1/4 npsm x 1/4 npt	1
16	220–855	MOTOR	
		Includes items 16a–16d	1
16a▲	185–954	.LABEL, Danger	1
16b	100–069	.BALL, sst, 1/4”	1
16c	107–263	.TERMINAL	2
16d	102–799	.TERMINAL	2
18	107–447	CONDUIT SEAL	1
20	106–078	SCREW, ovh, 10–24 x 3/8”	6
21	185–000	PRESSURE CONTROL COVER	1
22	183–371	LABEL, identification	1
23	**220–858**	**PRESSURE CONTROL**	**1**
24▲	177–762	LABEL, Warning	1
25	108–460	45°CONDUIT CONNECTOR	1
27	065–099	ELECTRICAL CONDUIT *specify length when ordering*	9.5 in.
30	223–766	HOSE, nylon, 1/4” ID, cpld 1/4 nspm (fbe), 29” (740 mm) long, spring guards both ends	1
32	162–453	NIPPLE, 1/4 npsm x 1/4 npt	1
33	100–188	NUT, hex, 5/16–18	7
34	100–214	LOCKWASHER, spring, 3/8”	7
35	110–963	CAPSCREW, hex hd, 5/16–18 x 7/8”	7
41	183–510	LABEL, identification	1
43	178–034	TAG, caution	1
44	237–677	PRESSURE RELIEF VALVE	1
45	106–062	WHEEL, semi–pneumatic	2
48	104–811	HUBCAP	2
49	176–817	RETAINING SPRING	1
50	176–818	PIN, hdless, 5/16” dia x 1”	1
51	218–035	BEARING HOUSING	1
52	218–034	CONNECTING ROD	1
53	100–643	CAPSCREW, sch, 1/4–20 x 1”	6
54	105–510	LOCKWASHER, 1/4”	6
56	179–961	GEAR REDUCER	1
62	206–994	THROAT SEAL LIQUID, 8 oz.	1
68	101–754	PLUG	1
70	110–037	SCREW	4
74	181–102	SPRING CLIP, large	1
75	186–495	DRAIN HOSE	1
76	186–494	SPRING CLIP, small	1
79	186–126	LABEL	1
80▲	185–955	LABEL, Danger	1
81▲	187–959	LABEL, Danger	1
85	223–541	HOSE, grounded,nylon, 1/4” ID, cpld 1/4 npsm(f), 50 ft (15 m) spring guards both ends	1
86	214–701	HOSE, grounded, nylon, 3/16” ID, cpld 1/4 npsm(f), 3 ft (0.9 m) long, spring guards both ends	1
87	**235–459**	**SPRAY GUN**	
		See manual 308–235 for parts	
		Includes RAC IV DripLess Tip Guard and 517 size SwitchTip	**1**

▲ *Replacement Danger and Warning labels, tags and cards are available at no cost.*

Technical Data

Electric Motor . . . . . 3/4 HP, DC
Electric Cord . . . . . 14 AWG, 3 wire
Power Requirements . . . . . 120 VAC, 60 Hz, 15A
Maximum Working Pressure . . . . . 2750 psi (190 bar)
Maximum Delivery . . . . . 0.75 gpm (2.8 lpm)
Cycles/Gallon (liter) 260 (70)
Tip Size . . . . . one gun to 0.025 tip
with latex at 2000 psi (138 bar)
Generator . . . . . 4000W minimum
Wetted Parts
Filter . . . . . *See manual 307–273*
Displacement Pump . . . . . *See manual 307–806*
Sprayer . . . . . Zinc–plated Carbon Steel, Stainless Steel
Fluid Inlet . . . . . 3/4 npt(m) with 30° ID chamfer
Fluid Outlet Size . . . . . 1/4 npsm(m)
NOTE: Delrin®

Dimensions

Weight	95 lb (43 kg)
Height	41 in. (1041 mm)
Length	20.5 in. (521 mm)
Width	20.5 in. (521 mm)

Graco Phone Number

TO PLACE AN ORDER, contact your Graco distributor, or call this number to identify the distributor closest to you: **1–800–367–4023 Toll Free.**

All written and visual data contained in this document reflects the latest product information available at the time of publication.
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Sales Offices: Minneapolis, Detroit, Los Angeles
Foreign Offices: Belgium, Canada, England, Korea, France, Germany, Hong Kong, Japan

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